

## ABSTRACT OF THE DISCLOSURE

A method for screening of compounds for binding differentiation at various drug target binding sites is used with a device measuring the enthalpy of reaction for the binding. The method includes merging test ligand with target compound and merging test ligand with target compound in the presence of at least one blocking agent. A first heat of reaction is detected for the merged test ligand and target compound solution and a second heat of reaction is detected for the merged test ligand and target compound solution in the presence of a blocking agent. The two heats of reaction are compared to determine whether a reaction has occurred.